DRAFT ANTIDEGRADATION IMPLEMENTATION PROCEDURES FOR SURFACE WATERS OF THE PUYALLUP TRIBE

PART I. INTRODUCTION

These antidegradation procedures provide detailed methods and guidance to be followed by the Puyallup Tribe Environmental Protection Department (the Department) in implementing the Tribe's Antidegradation Policy found in Section 15 of the Water Quality Standards for Surface Waters of the Puyallup Tribe. In all cases, applicable technology and water quality-based requirements are to be implemented in combination with the antidegradation requirements described in this document.

Implementation of tribal and federal antidegradation requirements serves to promote the maintenance and protection of existing surface water quality. Federal water quality regulations describe three levels, or "tiers", of antidegradation protection. Tier 3 waters are those designated waters that constitute an Outstanding National Resource, and are afforded the highest level of antidegradation protection. Tier 2 waters are considered high quality waters, and may be degraded only under limited circumstances when it is determined to be in the public interest. Tier 1 requires the protection of existing uses, and provides a base level of water quality for all waters.

In addition to these three levels, the Puyallup Tribe has added a fourth level for the protection of waters that are determined by the Tribe to be of exceptional cultural significance. This level of antidegradation protection is referred to as Tier 2.5, and waters with this designation are termed **Waters of Exceptional Cultural Significance**. The requirements for Tier 2.5 waters are intermediate between the Tier 2 and Tier 3 requirements identified in the federal regulations. All surface waters of the Puyallup Tribe have been designated as Tier 2.5 waters in the Tribe's water quality standards. Individual waterbodies may be designated as Tier 3 Outstanding National Resource Waters, either directly through tribal rulemaking, or through public nomination following the procedures described in this document. Additionally, surface waters that in the future may qualify as surface waters of the Puyallup Tribe will be assumed, by default, to qualify for Tier 2.5 protection. Because all surface waters of the Tribe are currently designated as Waters of Exceptional Cultural Significance, this document is focused on implementation procedures for Tier 2.5 and Tier 3 waters. Some discussion of Tier 1 and Tier 2 waters are included here for completeness; however, should more detailed procedures for Tier 1 and 2 waters be required, they will be established in the future.

Antidegradation requirements are triggered whenever a regulated activity is proposed that may have some effect on surface water quality, as determined by the Tribe. Such activities are reviewed to determine, based on the level of antidegradation protection afforded to the affected waterbody segment, whether the proposed activity should be authorized.

This guidance has two principal components. First, key terms are defined; and second, the procedures to be followed in completing an antidegradation review are presented. A copy of the antidegradation worksheet that the Department will use to document review findings is attached.

PART II. DEFINITIONS

An **Antidegradation Review** is the process by which the Tribe determines that antidegradation requirements are satisfied for a given regulated activity that may have some effect on surface water quality.

Assimilative capacity is the ability of a waterbody to receive wastewaters or toxic materials without deleterious effects and without damage to aquatic life or humans who consume the water, as determined based on critical conditions.

Bioaccumulative toxic substances are defined as both naturally occurring and manmade substances that are toxic, persist in the environment, and build up in food chains and, thus, pose risks to human health and ecosystems.

Bioconcentration Factor (BCF) is the ratio of a substance's concentration in tissue versus its concentration in water, in situations where the food chain is not exposed or contaminated. For nonmetabolized substances, it represents equilibrium partitioning between water and organisms.

Designated use means a use that is specified in water quality standards as a goal for the waterbody segment, whether or not it is currently being attained.

Existing use means a use that is actually attained in the waterbody on or after November 28, 1975, whether or not it is included in the water quality standards.

High quality water means a waterbody that meets the Tribe's test of "high quality," which is discussed in paragraphs VI(A)(2) and (3) of this guidance. In general, waters whose existing quality is better than necessary to support fishable/swimmable uses will be considered "high quality."

Outstanding National Resource Water (ONRW) is a waterbody that has been identified as possessing outstanding ecological or recreational attributes, and has been designated as an ONRW in the Tribe's water quality standards, in these procedures, or through the nomination and rulemaking process described in these procedures.

Reasonable Alternatives shall be identified based on case-specific information using methodologies approved by the Department. Generally speaking, non-degrading or less-degrading pollution-control alternatives shall be considered reasonable where the costs of such alternatives are less than 110 % of the costs of the pollution control measures associated with the proposed activity.

Regulated activity includes any activity that requires a permit or a water quality certification pursuant to tribal or federal law (e.g., CWA § 402 NPDES permits, CWA § 404 dredge and fill permits, any activity requiring a CWA § 401 certification), any activity subject to nonpoint source control requirements or regulations, and any activity which is otherwise subject to tribal regulations, permits, or approvals that specify that the antidegradation review process is applicable. For purposes of this implementation procedure, the term "proposed activity" means a proposed activity that is also a regulated activity.

Trading means establishing upstream controls to compensate for new or increased downstream sources, resulting in maintained or improved water quality at all points, at all times, and for all parameters. Trading may involve point sources, nonpoint sources, or a combination of point and nonpoint sources.

Waters of Exceptional Cultural Significance are waters that have been identified as possessing outstanding cultural and ecological recreational attributes and have been designated as waters of exceptional cultural significance through the Tribe's water quality standards or through the nomination and rulemaking process described in these procedures.

PART III. THE ANTIDEGRADATION REVIEW PROCESS

The Department will conduct some level of antidegradation review for all regulated activities that have the potential to affect existing water quality, as determined by the Department. The specifics of the review will depend upon the waterbody segment that would be affected, the tier of antidegradation protection applicable to that waterbody segment, and the extent to which existing water quality would be degraded.

In conducting an antidegradation review, the first task that will be addressed by the Department is to determine which tier of antidegradation applies. Unless a surface water is specifically designated as a Tier 3 ONRW by the Tribe, all surface waters of the Tribe will be treated as Tier 2.5 Waters of Exceptional Cultural Significance.

Once the correct tier of requirements is identified, the Department determines whether authorizing the proposed activity would be consistent with the Tribe's antidegradation requirements. The major conclusions of the Department's review are documented using an antidegradation review worksheet, a copy of which is attached to this implementation procedure. Based upon the review findings, a preliminary decision is made by the Department and subjected to intergovernmental coordination and public participation. Public participation occurs regardless of the outcome of the preliminary decision (i.e., whether the proposed activity would be authorized or denied).

The Department then considers public comments and reaches a final decision regarding whether to authorize the proposed activity pursuant to the Tribe's antidegradation requirements. The substance and basis of the final decision by the Department are documented in the administrative record. Below, the procedures to be followed by the

Department in reaching a preliminary decision under each tier of antidegradation are described in detail.

PART IV. TIER 3 PROCEDURES

A. Waters Qualifying for ONRW Protection

(l) Qualification Criteria

Segments will be subject to Tier 3 protection requirements only where an ONRW designation has been assigned by the Tribe through the tribal rulemaking procedures. The factors to be considered in determining whether to assign an ONRW designation may include the following: (a) location (e.g., on federal lands such as national parks, national wilderness areas, or national wildlife refuges), (b) previous special designations (e.g., wild and scenic river), (c) existing water quality (e.g., pristine or naturally-occurring), (d) ecological value (e.g., presence of threatened or endangered species during one or more life stages), (e) recreational or aesthetic value (e.g., presence of an outstanding recreational fishery), and (f) other factors that indicate outstanding ecological or recreational resource value (e.g., rare or valuable wildlife habitat). Where determined appropriate, the ONRW designation may be applied to an entire category of waters (e.g., a wilderness area or areas).

(2) Water Quality Requirements

Outstanding water quality is not a prerequisite for ONRW designation. The only requirement is that the segment have outstanding value as an aquatic resource, which may derive from the presence of exceptional scenic or recreational attributes, or from the presence of unique or sensitive ecosystems that have naturally low water quality (i.e., as measured by conventional parameters).

(3) Public Nomination

The public may nominate any surface water of the Puyallup Tribe for ONRW protection at any time by sending a written request to the following address: **Puyallup Tribe Environmental Protection Department, 1850 Alexander Avenue, Tacoma, WA, 98421**. The written request should explain why an ONRW designation is warranted based on one or more of the factors identified above.

B. Direct Sources to ONRWs

(1) Prohibition on New or Expanded Sources

Any proposed activity that would result in a permanent new or expanded direct source of pollutants to any segment that has been designated as an ONRW is prohibited. This prohibition applies to new sources, expansion of existing sources in which treatment levels are maintained, and expansion of existing sources in which treatment levels are

increased to maintain existing pollutant loading levels. Regardless of effluent quality, any new or expanded direct source is prohibited.

C. Sources Upstream from ONRWs

(1) No Change in Water Quality Allowed

Any proposed activity that would result in a permanent new or expanded indirect source of pollutants (i.e., an upstream source) to an ONRW segment is prohibited except where such source would have no effect on the existing quality of the downstream ONRW segment. Effects on ONRW water quality resulting from upstream sources will be determined by the Department based on appropriate techniques and best professional judgment. Factors that may be considered in judging whether ONRW quality would be affected include: (a) percent change in ambient concentrations predicted at the appropriate critical condition(s), (b) percent change in loadings (i.e., the new or expanded loadings compared to total existing loadings to the segment), (c) percent reduction in available assimilative capacity, (d) nature, persistence, and potential effects of the parameter, (e) potential for cumulative effects,(f) change in potential human health or ecological risks, and (g) degree of confidence in the various components of any modeling technique utilized (e.g., degree of confidence associated with the predicted effluent variability).

(2) Trading

A proposed activity that will result in a new or expanded upstream source may be allowed where the applicant agrees to implement or finance upstream controls of point or nonpoint sources sufficient to offset the water quality effects of the proposed activity. Where such trading occurs upstream of an ONRW segment, Tier 3 requirements will be considered satisfied where the applicant can show that water quality at all points within the study area will be either maintained or improved. The Department will document the basis for the trade through a Total Maximum Daily Load (TMDL) pursuant to CWA §303(d) requirements. Such TMDLs will include an appropriate margin of safety. Such a margin of safety will address, in particular, the uncertainties associated with any proposed nonpoint source controls, as well as variability in effluent quality for point sources. See the definition of trading in Part II.

(3) Information Requirements

The applicant may be required to provide information sufficient to evaluate the potential effects of the proposed activity on downstream ONRWs. The information that will be required in a given situation will be identified on a case-by-case basis by the Department.

D. Temporary and Limited Effects

(1) Guidelines

A direct or upstream (See Part VIII) source that would result in a temporary and limited effect on ONRW water quality may be authorized. The decision regarding whether effects will be temporary and limited will be handled on a case-by-case basis. As a non-binding rule of thumb, activities with durations less than one month and resulting in less than a 5% change in ambient concentration will be deemed to have temporary and limited effects. Decisions on individual proposed activities may be based on the following factors: (a) length of time during which water quality will be lowered, (b) percent change in ambient concentrations, (c) parameters affected, (d) likelihood for long-term water quality benefits to the segment (e.g., as may result from dredging of contaminated sediments), (e) degree to which achieving applicable water quality standards during the proposed activity may be at risk, and (f) potential for any residual long-term influences on existing uses.

PART V. TIER 2.5 PROCEDURES

A. Waters Qualifying for Protection as Waters of Exceptional Cultural Significance.

(1) Qualification Criteria

Segments will be subject to Tier 2.5 protection requirements only where an Exceptional Cultural Significance (ECS) designation has been assigned by the Tribe through the tribal rulemaking procedures. The factors to be considered in determining whether to assign an ECS designation may include the following: (a) location (e.g., on federal lands such as national parks. national wilderness areas, or national wildlife refuges), (b) previous special designations (e.g., wild and scenic river), (c) existing water quality (e.g., pristine or naturally-occurring), (d) ecological value (e.g., presence of threatened or endangered species during one or more life stages), (e) recreational or aesthetic value (e.g., presence of an outstanding recreational fishery, conservancy, or special aquatic site), and (f) other factors that indicate outstanding ecological or recreational resource value (e.g., rare or valuable wildlife habitat). Where determined appropriate, the ECS designation may be applied to an entire category of waters (e.g., all waters located within a national park). All waters that are currently surface waters of the Puyallup Tribe have been designated as Tier 2.5 ECSwaters in the Tribe's water quality standards.

(2) Water Quality Requirements

Outstanding water quality is not a prerequisite for an ECS designation. The only requirement is that the segment have outstanding value as an aquatic resource, which may derive from the presence of exceptional cultural, ecological, scenic, or recreational attributes, or from the presence of unique or sensitive ecosystems that have naturally low water quality (i.e., as measured by conventional parameters).

(3) Public Nomination

The public may nominate any tribal water for ECS protection at any time by sending a written request to the following address: **Puyallup Tribe of Indians Environmental**

Protection Department, 1850 Alexander Avenue, Tacoma, WA, 98421. The written request should explain why an ECS designation is warranted based on one or more of the factors identified above.

B. Direct and Indirect Sources to Waters of Exceptional Cultural Significance

(1) No Change in Water Quality Allowed

Except as noted below, any proposed activity that would result in a permanent lowering in water quality of any Waters of Exceptional Cultural Significance is prohibited. This procedure applies to both direct and indirect (i.e. upstream) sources of pollutants to Waters of Exceptional Cultural Significance. The prohibition applies to new sources and expansion of existing sources in which treatment levels are maintained. Proposed expansions that would also upgrade treatment levels such that existing loading levels will be maintained may be authorized. However, decisions regarding whether to allow new or expanded sources will be made on a case-by-case basis using appropriate techniques approved by the Department and best professional judgment. Factors that may be considered in judging whether water quality would be lowered include: (a) percent change in ambient concentrations predicted at the appropriate critical condition(s), (b) percent change in loadings (i.e., the new or expanded loadings compared to total existing loadings to the segment), (c) percent reduction in available assimilative capacity, (d) nature, persistence, and potential effects of the parameter, (e) potential for cumulative effects, and (f) degree of confidence in the various components of any modeling technique utilized (e.g., degree of confidence associated with the predicted effluent variability).

(2) Trading

A proposed activity that will result in a new or expanded source may also be allowed where the applicant agrees to implement or finance upstream (See Part VIII) controls of point or nonpoint sources sufficient to offset the water quality effects of the proposed activity. Where such trading occurs on or upstream of a waterbody segment, Tier 2.5 requirements will be considered satisfied where the applicant can show that water quality at all points within the jurisdiction of the Puyallup Tribe will be either maintained or improved. The Department will document the basis for the trade through a TMDL or other appropriate mechanism pursuant to CWA § 303(d) and appropriate Tribal requirements. Such trading will include an appropriate margin of safety. The required margin of safety will address, in particular, the uncertainties associated with any proposed nonpoint source controls, as well as variability in effluent quality for point sources. See the definition of trading in Part II.

(3) Information Requirements

The applicant may be required to provide information sufficient to evaluate the potential effects on downstream Waters of Exceptional Cultural Significance. The information that will be required in a given situation will be identified by the Department on a case-by-case basis.

(4) Exceptions

An exception may be made for permanent new or expanded sources that, overall, serve to maintain or enhance the value, quality, or use of any Waters of Exceptional Cultural Significance. Prior to allowing exceptions, the Department shall work with the project applicant to identify the least-degrading alternative. For example, a new or expanded source of water treatment facility effluent associated with a visitor center may be authorized where reasonable non-degrading or less-degrading treatment alternatives to allowing a new or expanded source are not available. Exceptions will be granted on a case-by-case basis; in general, exceptions will be granted only where uses will be fully protected and effects on existing water quality will be minimal.

C. Temporary and Limited Effects

(1) Guidelines

Activities that would result in a temporary and limited effect on water quality may be authorized. The decision regarding whether effects will be temporary and limited will be handled on a case-by-case basis. As a non-binding rule of thumb, activities with durations less than one month and resulting in less than a 5 % change in ambient concentration will be deemed to have temporary and limited effects. Decisions on individual proposed activities may be based on the following factors: (a) length of time during which water quality will be lowered, (b) percent change in ambient concentrations, (c) parameter(s) affected, (d) likelihood for long-term water quality benefits to the segment resulting from the proposed activity (e.g., as may result from dredging of contaminated sediments), (e) degree to which achieving applicable water quality standards during the proposed activity may be at risk, (f) potential for any residual long-term influences on existing uses, and (g) public use benefits resulting from the proposed activity (e.g., enhancement or expansion of public access, maintenance of the resource).

PART VI. TIER 2 PROCEDURES

A. Waters Qualifying for Tier 2 Protection

(1) Reserved

All surface waters of the Puyallup Tribe are designated as Tier 2.5Waters of Exceptional Cultural Significance in the Tribe's water quality standards. The need to develop specific Tier 2 procedures will be periodically evaluated by the Tribe, and procedures may be developed in the future in accordance with the Tribal rulemaking process.

PART VII. TIER 1 PROCEDURES

A. Waters Qualifying for Tier 1 Protection

(1) Waters Subject To Tier 1 Requirements

All waters are subject to Tier 1 protection. Those waters that are only subject to Tier 1 protection are those waters that have not been assigned a Tier 3 or Tier 2.5 antidegradation designation by the Tribe. All waters that are surface waters of the Puyallup Tribe have been designated as Tier 2.5 Waters of Exceptional Cultural Significance in the Tribe's water quality standards. The procedures included in this section pertain to the basic protection of existing uses that is required for all waters. More detailed implementation procedures for Tier 1-only waters may be developed in the future if necessary.

B. Two-Part Requirement

(1) Protect Water Quality and Uses

The Tribal antidegradation policy requires that existing uses, and the water quality necessary to protect existing uses, shall be protected and maintained. The requirement contains two parts: (1) protection of existing uses, and (2) protection of water quality necessary to maintain and protect existing uses.

C. Ensure Water Quality Necessary to Maintain and Protect Existing Uses

(1) Confirm that Designated Uses Address Existing Uses

Prior to authorizing any proposed activity, the Department shall ensure that water quality sufficient to protect existing uses fully will be achieved. An important decision that must be made by the Department is whether the waterbody currently supports, or has supported since November 28, 1975, an existing use that has more stringent water quality requirements than the currently designated uses. In making this decision the Department will focus on whether a higher designated use should be assigned to the waterbody to reflect an existing use. Where the Department determines that currently designated uses appropriately reflect the existing waterbody uses, the Department shall document that preliminary determination using the antidegradation review worksheet (attached). In such cases, the water quality control requirements necessary to protect designated uses will be presumed to also fully protect existing uses.

(2) Where Designated Uses do not Address Existing Uses

The procedure outlined in paragraph (1) above presumes that designated uses appropriately address existing uses pursuant to Tribal and federal requirements. Where this is not the case, a revision to Tribal standards may be needed because, pursuant to federal water quality regulations designated uses are required to reflect, at a minimum, all attainable (including currently attained, or existing) uses. Where existing uses with more stringent protection requirements than currently designated uses are identified, the Department will ensure levels of water quality necessary to protect existing uses

fully and, at the earliest opportunity, propose that appropriate revisions to the designated uses be adopted into the Tribal water quality standards. However, the Department will not delay Tier 1 protection pending the reclassification action.

(3) Require Water Quality Necessary to Protect Existing Uses

Where the Department determines that that the waterbody currently supports, or has supported since November 28, 1975, an existing use that has more stringent water quality requirements than the currently designated uses, the Department will identify the level of water quality necessary to protect existing uses fully for the parameters in question. The Department's estimate of the level of water quality required will be based on numeric Tribal water quality criteria, narrative Tribal water quality criteria, and/or federal criteria guidance. In general, water quality sufficient to maintain and protect existing uses for the parameters in question will be assigned using the same procedures that would have been followed had the water quality standards (i.e., uses and criteria) been appropriately assigned to begin with. The preliminary findings regarding existing uses and the level of water quality necessary to protect existing uses will be documented using the antidegradation review worksheet.

PART VIII. REVIEW PROCEDURES FOR INDIRECT SOURCES

In addition to the procedures for review of indirect sources already discussed, the following procedures shall also apply to Tribal review of indirect (upstream) activities potentially affecting surface waters of the Puyallup Tribe.

(1) Preliminary Review

The Department shall conduct a preliminary antidegradation review, at its own initiation or upon request, following procedures described above, of upstream activities with the potential to affect water quality in surface waters of the Puyallup Tribe.

(2) Preliminary Determination

Based upon a preliminary antidegradation review, the Department shall issue a preliminary determination regarding the potential for the activity under review to affect water quality (including assimilative capacity) in surface waters of the Puyallup Tribe.

- (a) If the Department determines that authorizing the activity will not affect water quality in surface waters of the Puyallup Tribe, the determination will be formalized and communicated to the Washington Department of Ecology and the U.S. Environmental Protection Agency, Region 10 (EPA).
- (b) If the Department determines that authorizing the activity may affect water quality in surface waters of the Puyallup Tribe, the Tribe will request consultation with the State or EPA to attempt to reach agreement on conditioning or denying the activity, or determining if more information is needed. Consultation between the Tribe and the Washington Department of Ecology shall follow the procedures outlined in the "Water

Resources Protocol between the Puyallup Tribe of Indians and the Washington Department of Ecology".

(3) Dispute Resolution

Resolution of disputes resulting from antidegradation review will be addressed according to the dispute resolution procedures under Section VI, Decision Making and Dispute Resolution, of the 1997 Intergovernmental Agreement among the Puyallup Tribe of Indians, the Washington State Department of Ecology, and the United States Environmental Protection Agency.

PART IX. DOCUMENTATION, PUBLIC REVIEW, AND INTERGOVERNMENTAL COORDINATION PROCEDURES

A. Documentation of Antidegradation Review Findings

(l) Antidegradation Worksheet

The Department will complete an antidegradation review for all proposed regulated activities that may have some effect on surface water quality. The findings of all antidegradation reviews will be documented using an antidegradation worksheet, a copy of which is attached to this guidance (attached).

B. Public Review Procedures

(1) Follow Tribal Requirements

The antidegradation review findings will be subjected to the Tribal public participation requirements found in the Tribe's Administrative Procedures. A separate public notice for purposes of antidegradation need not be issued. For example, the antidegradation preliminary findings may be included in the public notice issued for purposes of an NPDES permit or water quality certification.

(2) Content of Public Notice

In preparing a public notice, the Department will, at a minimum: (a) outline the substance and basis of the Tribe's antidegradation review conclusions, including the preliminary finding regarding whether to authorize the proposed activity, (b) request public input on particular aspects of the antidegradation review that might be improved based on public input (e.g., existing uses of the waterbody by the public, the preliminary determination on socio-economic importance), (c) provide notice of the availability of the antidegradation review worksheet, (d) provide notice of the availability of any introductory public information regarding the Tribal antidegradation program, and (e) include a reference to the Tribal antidegradation policy.

C. Intergovernmental Coordination Procedures

(1) Follow Established Protocols

The Department shall conduct all antidegradation reviews consistent with the intergovernmental coordination procedures included in the "Water Resources Protocol between the Puyallup Tribe of Indians and the Washington Department of Ecology", and the "1997 Intergovernmental Agreement among the Puyallup Tribe of Indians, the Washington State Department of Ecology, and the United States Environmental Protection Agency", as appropriate.

(2) Minimum Process

At a minimum, the Department will provide copies of the completed antidegradation review worksheet and/or the public notice to appropriate state and federal government agencies along with a written request to provide comments by the public comment deadline.

(3) Intergovernmental Consultation

As discussed above, intergovernmental coordination will follow procedures described in the "Water Resources Protocol between the Puyallup Tribe of Indians and the Washington Department of Ecology", and the "1997 Intergovernmental Agreement among the Puyallup Tribe of Indians, the Washington State Department of Ecology, and the United States Environmental Protection Agency", as appropriate.

(4) Dispute Resolution

Resolution of disputes resulting from implementation of these antidegradation implementation procedures will be addressed according to the dispute resolution procedures under Section VI, Decision Making and Dispute Resolution, of the 1997 Intergovernmental Agreement among the Puyallup Tribe of Indians, the Washington State Department of Ecology, and the United States Environmental Protection Agency.